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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/825,752	04/16/2004	David Hung	12.023011-CIP	8506
75	90 07/12/2005		EXAM	INER
Theodore Allen, Esq.			BROWN, MICHAEL A	
Cytyc Corporati	on			
85 Swanson Ro	ad		ART UNIT	PAPER NUMBER
Boxborough, MA 01719			3764	
			DATE MAIL ED. 07/13/2004	

DATE MIAILED: 07/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

			)I			
	Application No.	Applicant(s)				
	10/825,752	HUNG ET AL.				
Office Action Summary	Examiner	Art Unit				
	Michael Brown	3764				
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet w	vith the correspondence address	SS			
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a r  - If NO period for reply is specified above, the maximum statutory perions  - Failure to reply within the set or extended period for reply will, by state that the period for reply will be stated to the provide that the provide the provide that the provide that the provide the provide that the provide the provide the provide that the prov	N. 1.136(a). In no event, however, may a eply within the statutory minimum of the will apply and will expire SIX (6) MC tute, cause the application to become A	reply be timely filed  irty (30) days will be considered timely.  NTHS from the mailing date of this commuNBANDONED (35 U.S.C. § 133).	unication.			
Status						
1) Responsive to communication(s) filed on	·					
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ TI	his action is non-final.					
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ⊠ Claim(s) 1-5 is/are pending in the application 4a) Of the above claim(s) is/are withd 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-5 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and	rawn from consideration.					
Application Papers						
9) The specification is objected to by the Exami	iner.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the	he drawing(s) be held in abeya	ance. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the corn 11) The oath or declaration is objected to by the	·					
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for forei  a) All b) Some * c) None of:  1. Certified copies of the priority docume  2. Certified copies of the priority docume  3. Copies of the certified copies of the priority docume  application from the International Bure  * See the attached detailed Office action for a life	ents have been received. ents have been received in riority documents have bee eau (PCT Rule 17.2(a)).	Application No n received in this National Sta	ge			
Attachment(s)						
1) Notice of References Cited (PTO-892)		Summary (PTO-413)				
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date</li> </ul>		o(s)/Mail Date Informal Patent Application (PTO-15: 	2)			

#### **DETAILED ACTION**

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Note: Although this case had been allowed references were discovered during another search, which prompted the examiner to withdraw this case from issue and to send out a non-final rejection. The examiner apologizes for any inconveniences incurred by the applicant or the attorney because of this decision.

### Specification

### Content of Specification

- (a) <u>Title of the Invention</u>: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) <u>Cross-References to Related Applications</u>: See 37 CFR 1.78 and MPEP § 201.11.
- (c) <u>Statement Regarding Federally Sponsored Research and Development:</u> See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc:
  The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Or alternatively, Reference to a "Microfiche Appendix": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.

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Art Unit: 3764

(f) <u>Background of the Invention</u>: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:

(1) <u>Field of the Invention</u>: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."

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- (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) <u>Brief Description of the Several Views of the Drawing(s)</u>: See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.

(j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).

- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (I) <u>Sequence Listing.</u> See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

The specification lacks a brief description of the drawings section. On page 12, lines 15-19 there appears to be a description of figure 1 and not figure 2 as recited in the specification. The drawings are objected to as containing excessive descriptive language/material not contained in the specification. Specifically, the structure of figure 3 is not contained in the specification.

#### **Double Patenting**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 3 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 26 of U.S. Patent No. 6,391,026. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of the present invention only positively recites a method of treating a breast comprising applying vibration to the duct (where to the duct can be internal or external to the breast). Claim 26 of Hung recites the same method comprising treating a breast by vibrational energy. Although the vibrational energy of Hung is used to activate the agent in the duct, the result is still an application of ultrasound to the duct. The vibrational energy of the Hung patent is also used to increase the amount of retrievable cells via activation of the agent.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Endo '327.

Claims 1 and 3 of the present invention only positively recite a method of treating a breast comprising applying vibration to the duct (where "to the duct" can be external to the breast). The "increasing a retrievable cell amount" by "inducing cell sloughing" is an inherent result of vibration applied to the breast. According to the specification of the present invention, there doesn't appear to be any specific vibrational frequency or specific application method needed to achieve the desired result. In fact, the specification recites on page 12, lines 19-19, the method can also comprise applying vibration or other motion or movement internally or externally to the beast by device, not limited to, ultrasound and other sonic devices.

Since claim 1 can be interpreted very broadly, the Endo vibration device when applied to the breast (col. 2, lines 67-68) would inherently provide the desired result of the method claim (even if very limited). Also any vibration applied externally to the breast would inherently be transmitted to a duct since the ducts are present in a majority of the breast. In other words, it would be impossible to vibrate the breast with out vibrating a duct.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Brenden '403.

Similar to Endo above, Brenden discloses an ultrasound device that meets the limitation of the claims since Brenden discloses an ultrasonic vibration to the breast.

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hung '228 in view of Endo.

Hung discloses in col. 11, lines 65- col. 12, lines 40 a method for increasing a retrievable cell amount, substantially as claimed. However, Hung discloses massaging the breast. Endo teaches applying vibration to the breast. It would have been obvious to one having ordinary skill in the art at the time that the invention was made that vibration as taught by Endo could be substituted for massaging as disclosed by Hung because either movement could be used to move tissue in the breast duct to allow for movement of the tissue from the breast duct. Also, fast massaging of the breast would provide some vibration.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. No additional prior art was cited during this office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Brown whose telephone number is 571-272-4972. The examiner can normally be reached on 5:30 am-4:00 pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gergory Huson can be reached on 571-272-4887. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. Brown July 11, 2005

MICHAEL A. BROWN
PRIMARY EXAMINER

Michael a.B.